# THE MEANING OF BACKACHE IN GYNECOLOGY

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BACKACHE is said to be one of the most frequent of all gynecologic complaints. Lynch,[1] analyzing a series of 1041 gynecologic cases, found that 49 per cent of the patients had lumbosacral pain and that in 76.5 per cent of instances this disturbance was due to a gynecologic condition. Graves,[2] in an analysis of 500 cases of retroversion, found backache a definite symptom in 76 per cent. According to Ward,[3] 85 per cent of cases of lumbosacral bachache are of gynecologic origin and only 15 per cent are due to orthopedic causes. In my own experience, the above figures with regard to the etiologic importance of gynecologic conditions are unduly high and other factors, including sacroiliac abnormalities, urologic disturbances and toxic conditions, are entitled to equal attention; nevertheless the fact remains that bachache is an important symptom in gynecologic cases.

Gynecologic diseases, particularly retrodisplacement of the uterus, were long held to be almost the sole cause of backache in women. More recently, however, careful observations have proved that orthopedic factors in the nature of deviations of the vertebral column and pelvis from the normal constitute a fairly prolific cause of sacral pain. A further factor is an increased sensibility of the vegetative nervous system, which is commonly associated with states of lowered vitality.

A woman's backache is usually located in the sacral region. In the absence of a gynecologic condition, it may be due to disease of the other pelvic viscera, abdominal disturbances, or irregularities of the bones, joints or muscles of the lower part of the back, the lower abdomen or the thighs. A faulty posture, fatigue from overwork or unhygienic habits, and focal infection are further important etiologic factors.

## TYPES OF BACKACHE

Backache in women may be classified conveniently under three headings: 1 the pelvic type, 2 the orthopedic type and 3 backache due to focal infection.

1. *The Pelvic Type* may be subdivided into two varieties, namely, (a) backache due to physiologic congestion and (b) that due to uterine displacements. The first variety is apt to occur during the childbearing age, especially at the time of the menstrual period. It arises from the periodic engorgement of the pelvic organs associated with this function. A temporary aggravation of habitual constipation may also be responsible for this form of backache. The second variety arises from the circulatory disturbances associated with uterine malpositions and the consequent dragging on the uterine ligaments and supports. While constantly present, it is aggravated by menstruation and may be accompanied by vesical and rectal symptoms.

2. *The Orthopedic Type.* Sacroiliac abnormalities constitute the most important causes of this type of backache. However, attention must be given to faulty postures, especially exaggerated lordosis; to fallen plantar arches associated with spinal rigidity; and to inflammatory conditions affecting the lumbar muscles or fascia. Syphilitic spondylitis may give rise to severe lumbar pain. Sacralization of the fifth lumbar vertebra, that is, an exaggerated development of its transverse process so that it resembles a part of the sacrum, is another occasional cause of persistent back pains. According to Doub,[4] calcification of the

iliolumbar ligaments may cause backache in a certain number of cases. Urologic conditions must be investigated in cases of obscure backache, as many disturbances affecting the excretory apparatus are capable of giving rise to severe backache. Lumbar backache is a common result of fatigue or faulty posture; sacral discomfort, on the other hand, is usually independent of muscular or articular strain and arises most often from gynecologic affections.

3. *Backache Due to Focal Infection.* In a small group of women, backache undoubtedly arises from focal infection. The cause of the pain in such cases is a toxic arthritis affecting the spine or sacroiliac articulation, which arises from such distant foci as the apices of the teeth, the crypts of the tonsils or the accessory nasal sinuses. Following a recent influenza epidemic, many women who had suffered from the disease in either a mild or a severe form complained of backache for months afterward. In the majority of instances, the pain was around the scapula; but in several cases I observed it in the sacral region at a site that has usually been regarded as typical of gynecologic diseases. This backache was of the rheumatic type and subsided gradually as the defensive forces of the body overcame the local infection.

## DISCUSSION OF CAUSES

Returning to the gynecologic causes of backache, it must be admitted that pelvic congestion and inflammation with traction on the uterine ligaments are a common cause of lumbosacral pain. Conditions apt to produce backache include retroversion of the uterus, prolapsus, rectocele and cystocele. A fibromyoma, by exerting pressure on the roots of the sacral nerves, may cause backache. The nerve trunks in the hollow of the sacrum are easily affected by pressure from any cause, including congestion, a displaced uterus, traction on the ligaments or a tumor. When the cause of this pressure is removed, the backache is relieved. Treatment may take the form of manual replacement of the uterus and the use of a pessary, correction of faulty posture, local measures for the relief of congestion or surgical intervention.

Affections of the bony ring of the pelvis constitute an important cause of sacral pain in women. Accurate roentgenographic study of the vertebral column and pelvis will disclose the origin of many backaches that were formerly assumed to be of gynecologic origin. Typical cases result from injuries of the pelvic girdle by repeated pregnancies, a condition somewhat analogous to partial separation of the symphysis pubis following childbirth. On examination in such cases, a deep-seated lumbar lordosis is noted and the roentgen plates show a more or less symmetrical lowering of the sacrum between the ossa innominata with pronounced rotation of the sacrum around a transverse axis, widening of the sacral symphyses and relaxation of their attachments. The application of a strong pelvic supporting belt around the ring of the pelvis gives considerable relief.

Many cases of backache arise from orthopedic conditions affecting the pelvic bones, especially those that are associated with abnormal mobility and relaxation of the sacrum. Sometimes associated arthritic changes are demonstrable. From a clinical viewpoint, these cases are fundamentally different from those associated with sacral pains occurring around or after the climacteric; in the latter group, the condition is primarily an arthritic process of the vertebral or sacroiliac articulations. In either case, however, the increased body weight superimposed upon the joints by the advent of pregnancy or the menopause necessarily increases the severity of the backache.

Tuberculosis of the sacroiliac articulation or arthritis of the sacrococcygeal joint may cause sacral pain, which may be associated with uterine displacement and thus give rise to confusion. Localized sacral pain on crossing the legs is especially characteristic of chronic arthritic disturbances, as is also pain in the hollow of the sacrum on vaginal pressure against the synchondrosis or the rami of the ischium.

## TREATMENT

Considering the diverse conditions that may cause backache in women, no single method of treatment can be followed. Treatment must necessarily be guided by the particular cause of the backache in a given case. Responsible gynecologic conditions must be corrected, whether by reposition of a displaced uterus, local treatment for congestion or operation. Adequate exercise, especially walking in the open air with proper footwear, helps to relieve pelvic congestion. A fair number of cases of backache are due to flat feet, and in such cases correct treatment for the arches causes the backache to disappear. In cases due to orthopedic disturbances of the pelvic ring, the application of a strong supporting belt gives much relief. Symptomatic backache arising from focal infection demands the localization and removal of the offending foci as far as possible.

From what has been said it is apparent that the so-called gynecologic backache is gradually losing ground with the advent of more exact knowledge; that various abnormal conditions not associated with the pelvic viscera may cause lumbosacral pain in a definite percentage of cases; and that, in every individual case, the cause can be found only after a careful examination of the whole patient.

## SUMMARY

Gynecologic affections have been variously estimated to be the cause of lumbosacral backache in women in from 30 to 85 per cent of cases. Recently, however, more exact knowledge has greatly reduced the relative importance of the so-called gynecologic backache. In my own experience, the gynecologic causes of backache have been greatly overestimated.

There are three great groups of backaches occurring in women; namely, 1 the pelvic type, which may result from a physiologic congestion at the menstrual epoch or uterine malpositions and pelvic inflammation; 2 the orthopedic type, arising from such conditions as sacroiliac relaxation, faulty posture, flat feet, spondylitis, and involvement of the lumbar muscles or fascia; and 3 the focal infective type, due to distant infection in the teeth, tonsils, accessory nasal sinuses, or elsewhere.

Every case of obscure backache requires a study of the entire patient. Only when the investigation is conducted carefully from all angles may we hope to discover the particular cause in an individual case and thus be in a position to direct effective treatment.

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